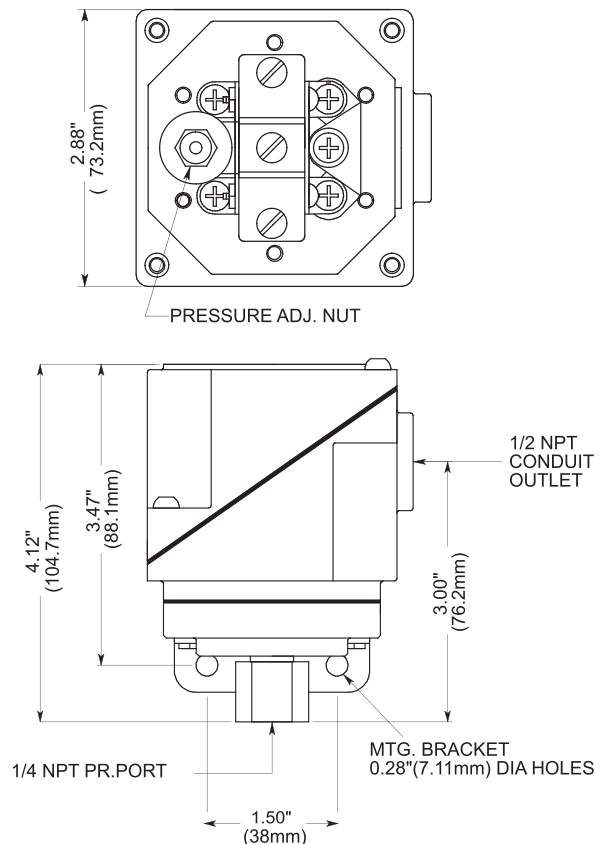


- Ranges from 2 to 300 psi (0.01 to 2.07 MPa)
- Rugged NEMA 4X & 12 & 13 Housing Std.
- Class I, Div. I, Gr. C & D Available
- Up to Two SPDT Contacts
- Various Wetted Materials Available



GENERAL DESCRIPTION

The Model Series 2WPS Pressure Switch features a rugged, compact, sensitive switching mechanism actuated by a diaphragm assembly. This mechanism can be supplied with one S.P.D.T. electric switch or two S.P.D.T. electric switches that are independently adjusted. The unit can be supplied with no housing, or enclosed in a rugged die cast NEMA 4X, 12 and 13 housing. The enclosed model is designated 2WPSW. With the cover of the enclosure removed, the terminals of the electric switch(es), and the pressure adjustment(s) are exposed for easy wiring and adjustment of the pressure setting. The die cast cover is equipped with captive stainless steel screws that retain the cover gasket when the cover is removed. A useful feature of the single switch enclosed model is a calibrated pressure adjustment that aligns with a numerical pressure indicating scale showing the set point range. Other useful options can easily be specified with this model. See the Special Features section on the opposite side for special wetted materials and options for particular applications.

OTHER 2WPS MODELS ARE AVAILABLE

The modular design of pressure-sensing elements used in the 2WPS series switches allows a variety of models for different pressure applications. These applications include High Pressure, Differential Pressure, Vacuum, and Vacuum-Pressure models using diaphragms, bellows, and pistons for actuation. See individual information sheets describing these models.

SPECIFICATIONS

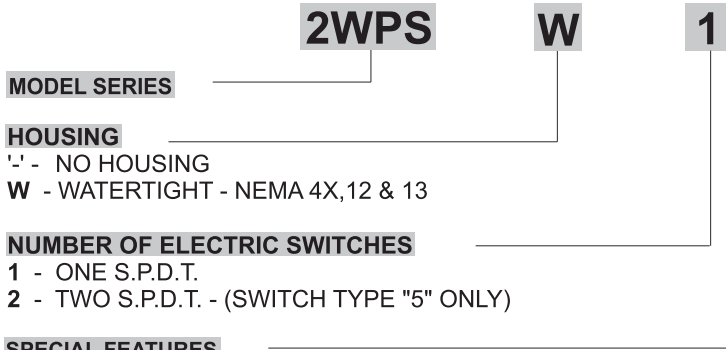
PHYSICAL DATA (Standard)

-see back for special features

- Maximum Ambient Temperature:** 180°F/82°C
- Minimum Ambient Temperature:** -20°F/-29°C
- Pressure Connection:** 1/4NPT female is Standard, 1/2NPT male is available ("M"option)
- Electrical Connection:** 1/2 NPT
- Housing:** Diecast Aluminum
- Deadband:** Fixed
- Sensitivity:** 1/2% of range (for SPDT)
- Drift:** <1% of range (100,000 operations)
- Weight:** Approx. 1.5 lbs.
- Contact Ratings:** 15A - 125, 250, 480 VAC
- Port Material:** Brass & Aluminum
- Diaphragm Material:** Buna N, Teflon Protected, Viton
- Set Point Adjustment:** Screw type, field adjustable
- No. of Contacts:** One or Two S.P.D.T.
- Contact Listings:** UL Recognized, CSA Certified

ORDERING A SWITCH

1. SPECIFY A MODEL NUMBER



HOUSING

- '-' - NO HOUSING
- W - WATERTIGHT - NEMA 4X, 12 & 13

NUMBER OF ELECTRIC SWITCHES

- 1 - ONE S.P.D.T.
- 2 - TWO S.P.D.T. - (SWITCH TYPE "5" ONLY)

SPECIAL FEATURES

- M - 1/2 NPT MALE PROCESS CONNECTION
- O - HIGH OVERPRESSURE - INCREASES MAX. PRESSURE TO 1000 PSI(7.0MPa) FOR RANGES 0-2 PSI (0-0,01MPa) TO 0-20 PSI(0-0,14MPa); MAX. PRESSURE IS 1500 PSI (10,35MPa) FOR RANGES 0-50 PSI(0-0,35MPa) AND UP
- Q - DOUBLE SNAP ACTING BELLEVILLE SPRING - TO PROVIDE POSITIVE SETPOINT ACCURACY IN HIGH VIBRATION APPLICATIONS
- SS - STAINLESS STEEL WETTED TRIM MATERIAL
- SN - BRASS WETTED TRIM MATERIAL
- SI - TEFLON WETTED TRIM MATERIAL
- SY - PVC WETTED TRIM MATERIAL
- T - TEFLON PROTECTED DIAPHRAGM (THE RANGE IS BELOW 100 PSI)
- U - SPECIAL EPOXY PAINT
- Z - VITON DIAPHRAGM MATERIAL

TYPE OF ELECTRIC SWITCHES

- 1 - LOW DEADBAND
15A - 125, 250, 480 VAC
- 2 - STANDARD DEADBAND
15A - 125, 250, 480 VAC; 0.5A - 125 VDC
- 3 - HIGH DC RATED (MAGNETIC BLOWOUT)
10A - 125 VDC; 3A - 250 VDC
- 5 - SUB MINIATURTE SWITCH - 2 S.P.D.T.
5A - 125, 250 VAC; 0.5A - 125 VDC
- 6 - GOLD CONTACT -
1 A - 125 VAC

* SPECIAL FEATURES SUCH AS STAINLESS TAGGING, OR SPECIAL WETTED PARTS; KYNAR, KALREZ, HASTELLOY, ETC. ARE AVAILABLE ON REQUEST. CONSULT FACTORY FOR CAPABILITIES AND PRICING FOR ANY FEATURES NOT SHOWN.

2. SPECIFY A RANGE

ADJUSTABLE PRESSURE RANGE		MAXIMUM DEADBAND				MAX. WORKING PRESSURE	
		TYPE "2"		TYPE "5"			
PSI	MPa	PSI	kPa	PSI	kPa	PSI	MPa
0-2	0-0.01	0.25	1.72	0.23	1.59	20	0.14
0-5	0-0.05	0.27	1.86	0.50	3.45	20	0.14
0-10	0-0.07	0.34	2.34	0.90	6.21	50	0.35
0-20	0-0.14	0.50	3.45	1.9	13.1	50	0.35
0-50	0-0.35	1.6	11.03	6.0	41.35	250	1.72
0-100	0-0.7	1.9	13.1	8.3	57.23	250	1.72
0-200	0-1.38	4.4	30.34	16.0	110.3	500	3.45
0-300	0-2.07	5.3	36.54	22.0	151.7	500	3.45

INSTALLATION NOTES

Orientation - The 2WPS will operate satisfactorily in any position, however, mounting the device vertically will allow the easiest adjustability and reduce sediment in the pressure chamber.

Wiring - Switches may be wired to 'normally open' or 'normally closed' terminals on electric switch(es). Single switch units have screw terminals while dual switch versions use push-on connectors.

Adjustment - Turn pressure adjustment nut(s) clockwise to increase setpoint. Detailed installation & calibration instructions are provided for every shipment. Factory setting is available at no charge.

DEADBAND NOTES

The deadbands listed in the tables are the maximum switch differentials when the standard (Type 2 or Type 5) electric switch is used.

Deadband is affected by the type of electric switch used. Each type of electric switch's effect on deadband is as follows:

Type "1" - *Low Deadband* - Use TYPE 2 table values.

Type "2" - *Std. Deadband* - Use table values.

Type "3" - *High DC Rated* - Multiply TYPE 2 table values by two.

Type "5" - *Sub Miniature* - 2 S.P.D.T. - Use TYPE 5 table values.

Type "6" - *Gold Contact* - Use TYPE 2 table values.

Wiring Schematic

